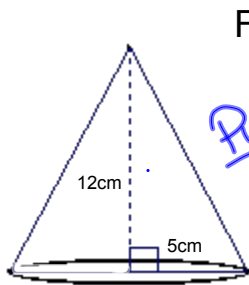
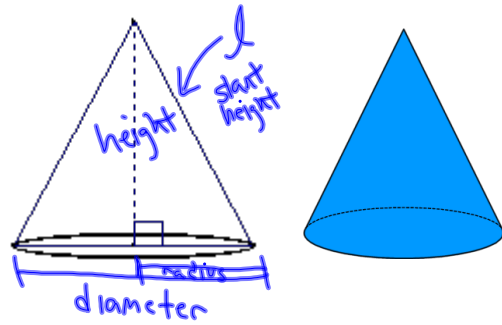


9.3 and 9.5

Area and Volume of Cones



Formulas:

$$\begin{aligned} LA &= \frac{1}{2} p l \\ SA &= LA + B \\ V &= \frac{1}{3} B h \end{aligned}$$

Pyth. thm

$$\begin{aligned} l^2 &= r^2 + h^2 \\ &= 5^2 + 12^2 \\ \sqrt{l^2} &= \sqrt{25 + 144} \\ l &= 13 \end{aligned}$$

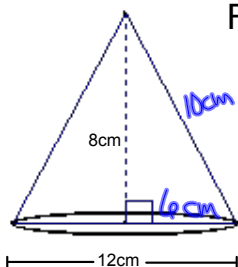
$$(2\pi r) p = 10\pi$$

$$(\pi r^2) B = \pi(5)^2 = 25\pi$$

$$LA = \frac{1}{2} p l = \frac{1}{2} 10\pi \cdot 13 = 65\pi$$

$$SA = LA + B = 65\pi + 25\pi = 90\pi$$

$$V = \frac{1}{3} B h = \frac{1}{3} 25\pi \cdot 12 = 100\pi$$



Formulas:

$$\begin{aligned} LA &= \frac{1}{2} p l \\ SA &= LA + B \\ V &= \frac{1}{3} B h \end{aligned}$$

$$\begin{aligned} l^2 &= 6^2 + 8^2 \\ l^2 &= 36 + 64 \\ l^2 &= 100 \\ l &= 10 \text{ cm} \end{aligned}$$

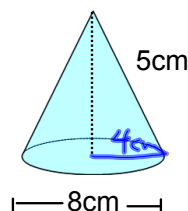
$$p = 2\pi 6 = 12\pi$$

$$B = 36\pi$$

$$LA = \frac{1}{2} 12\pi \cdot 10 = 60\pi$$

$$SA = 60\pi + 36\pi = 96\pi$$

$$V = \frac{1}{3} 36\pi \cdot 8 = 96\pi$$



Formulas:

$$\begin{aligned} LA &= \frac{1}{2} p l \\ SA &= LA + B \\ V &= \frac{1}{3} B h \end{aligned}$$

$$\begin{aligned} l^2 &= r^2 + h^2 \\ 5^2 &= 4^2 + h^2 \\ 25 &= 16 + h^2 \\ 9 &= h^2 \\ 3 &= h \end{aligned}$$

Assignment:

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13, [23-25](#), 28 p, B, LA, and SA

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